

Evaluation of the combination of vitamin D3 and papaya leaf on muscle antioxidant activity of spent chicken.

ABSTRACT

Eighty spent chickens were employed in this study to assay the effect of combination of vitamin D3 and papaya leaf on antioxidant activity of meat in spent layer hens. Diets were a corn-soybean meal based diet for finisher layer with and without vitamin D3 which was supplemented with different levels of 0, 0.5, 1 and 2% for papaya leaf meal. Experiment lasted for 21 days. At day 0, 7, 14 and 21, the birds were scarified and breast muscle was obtained to determine antioxidant activity. Antioxidant activity was measured using 1, 1-Diphenyl-2-Picrylhydrazyl (DPPH). Result obtained from this study demonstrated that antioxidant activity of meat showed remarkable improvement between dietary treatments fed mix of vitamin D3 and papaya leaf and control group. In conclusion, vitamin D3 and papaya leaf when combined indicated an improvement in antioxidant activity of the spent meat.

Keyword: Antioxidant activity; Breast muscle; Corn soybean; Malaysia; Spent meat; Vitamin D3 and papaya leaf combination.